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09/529,184	04/07/2000	Mark Jacob Ebling	RCA 88759	1451

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EXAMINER

DEMICO, MATTHEW R

ART UNIT PAPER NUMBER

2611

13

DATE MAILED: 02/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/529,184

Applicant(s)

EBLING ET AL.

Examiner

Matthew R Demicco

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21,44 and 46-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21,44 and 46-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is responsive to an amendment filed 11/28/03. Claims 1-21, 44 and 46-48 are pending. Claims 22-43 and 45 are canceled. Claims 11, 13-18, 20-21 and 46-48 are amended. The Examiner hereby withdraws the objections to the drawings and specification in light of the amendment. Further, the Examiner withdraws the 35 U.S.C. 112 rejection of Claim 46 in light of the amendment.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 10, 12 and 19 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's arguments filed with respect to claim 44 have been fully considered but they are not persuasive. Regarding Claim 44, Applicant provides no argument but merely states that neither Maa nor Matthews disclose the claimed feature. The Examiner points to Columns 14 and 15 of the Maa patent which disclose the use of ATSC/MPEG2 system streams. As is well known in the art, video, audio and data streams are packetized and multiplexed together in an MPEG2 system stream. PIDs are assigned to each data stream in order to access them. Therefore, it is inherent in any system that uses such ATSC/MPEG2 system streams that the PID must be used to identify the location of data representing a video program in the packetized program information. This reads on the claimed third identifier.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-8 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,818,935 to Maa.

Regarding Claim 1, Maa discloses an apparatus for decoding packetized program information from a first source to provide data content of a program. The system of Maa is a set top box (Col. 4, Line 56) for accessing Internet links embedded in a video signal (Col. 4, Lines 19-37). The system of Maa discloses means for identifying information in a program packet (See Figure 1, Video Data Extractor), which describes a multimedia object (Web Page) associated with an image in the program information (Col. 5, Lines 20-25). The multimedia object description information contains a location indicator identifying a location of a multimedia object for use in acquiring said multimedia object in the form of a URL (Col. 5, Lines 26-64). The system of Maa further has means for acquiring and decoding the multimedia object using the description information (See Figure 1, Modem and Processing Unit) and formatting the object for display (See Figure 1, Font Repository and Video Display Processor). What is not disclosed, however, is a type indicator identifying a multimedia object type for use in decoding the multimedia object. Official Notice is hereby taken that it is well known in the art to embed a type indicator identifying a multimedia object type in a data stream containing multimedia

objects. One such example is the Multipurpose Internet Mail Extension (MIME) type indicator, which is used by web browsers, among others, to determine the nature of embedded multimedia objects. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Maa to use the type indicator of the well-known prior art in order to support a wide variety of multimedia object types.

Regarding Claim 2, Maa discloses an apparatus as stated above in Claim 1 wherein the location indicator identifies a location of the multimedia object in information derived from a second source different from the first source. In the system of Maa, the second source is the Internet and the first source is a video signal (See Figure 1).

Regarding Claim 4, Maa discloses an apparatus as stated above in Claim 2 wherein the location indicator identifies a location of a multimedia object derived from the second source using an Internet URL as stated above. Further, it is inherent in such a system that to properly address and communicate with a web site referenced by a URL, the IP address must be resolved and used.

Regarding Claim 5, Maa discloses an apparatus as stated above in Claim 4 wherein the means for acquiring the multimedia object includes establishing bi-directional communication with the second source using the location indicator. The bi-directional path (Internet connection, See Figure 1) is different from the communication path between the decoding apparatus and the first source ("RF video signal," Col. 4, Line 23).

Regarding Claim 6, Maa discloses an apparatus as stated above in Claim 1 wherein the multimedia object comprises a web page that is viewed in a web browser (Col. 6, Lines 53-64). It is inherent in such a system that a web page being displayed on a web browser would be able to display video or still images, audio, text, advertisements, icons, animation, Email or a user prompting indicator such as a form table.

Regarding Claim 7, Maa discloses an apparatus as stated above in Claim 1. The MIME type of the well-known prior art includes data relating to the object format as stated above.

Regarding Claim 8, Maa discloses an apparatus as stated above in Claim 1 wherein the formatting means include means for associating the multimedia object with a video image (Col. 4, Lines 51-65) wherein the means forms a composite image for display combining the multimedia object and a video program (Col. 5, Lines 1-3).

Regarding Claim 19, Maa discloses a method for decoding packetized program information to provide data content of a program. The system of Maa is a set top box (Col. 4, Line 56) for accessing Internet links embedded in a video signal (Col. 4, Lines 19-37). The system of Maa discloses identifying information in a program packet (See Figure 1, Video Data Extractor), which describes a multimedia object (Web Page) associated with an image in the program information (Col. 5, Lines 20-25). The multimedia object description information contains a location indicator identifying a location of a multimedia object for use in acquiring said multimedia object in the form of a URL (Col. 5, Lines 26-64). The system of Maa further acquires and decodes the multimedia object using the description information (See Figure 1, Modem and

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Processing Unit) and formats the object for display (See Figure 1, Font Repository and Video Display Processor). What is not disclosed, however, is a type indicator identifying a multimedia object type for use in decoding the multimedia object. Official Notice is hereby taken that it is well known in the art to embed a type indicator identifying a multimedia object type in a data stream containing multimedia objects. One such example is the Multipurpose Internet Mail Extension (MIME) type indicator, which is used by web browsers, among others, to determine the nature of embedded multimedia objects. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Maa to use the type indicator of the well-known prior art in order to support a wide variety of multimedia object types.

Regarding Claim 20, Maa discloses a method as stated above in Claim 19 wherein the multimedia object is associated with a video image (Col. 5, Lines 14-25).

Regarding Claim 21, Maa discloses a method as stated above in Claim 20 wherein a composite image is formed for display combining the multimedia object and a video program (Col. 5, Lines 1-25).

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maa in view of U.S. Patent No. 5,768,539 to Metz et al.

Regarding Claim 3, Maa discloses an apparatus as stated above in Claim 2. What Maa does not disclose, however, is the use of an MPEG packet identifier (PID) in the location indicator for the location of the multimedia object. Metz discloses a set-top terminal connected to a network for displaying additional programming information as

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seen in Figure 9. Metz discloses the specification of an MPEG PID in the location indicator to locate audio and video data to be decoded and presented in response to a user input (Col. 43, Lines 35-39). Metz is evidence that ordinary workers in the art would recognize the benefit of utilizing MPEG PIDs to transport multimedia data and a pointer to this data in a location indicator. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the video and multimedia-displaying apparatus of Maa with the referencing of MPEG PIDs for audio and video transport and location of Metz in order to transport and address multimedia objects sent in auxiliary data streams multiplexed with the initial video feed data.

7. Claims 9-11, 44 and 46-48 are rejected under U.S.C. 103(a) as being unpatentable over Maa in view of U.S. Patent No. 6,025,837 to Matthews, III et al.

Regarding Claim 9, Maa discloses an apparatus as stated above in Claim 1. What is not disclosed, however, is the use of ancillary information to convey an electronic program guide from the first source wherein the multimedia object is associated with the program guide. Matthews discloses an electronic program guide with a hyperlink browser. Ancillary information containing EPG data is conveyed through the first data source, in this case RF Communication from a video head end (Col. 6, Lines 45-64). Further, Matthews discloses the association between the multimedia object and the program guide (Col. 9, Lines 56-60). Matthews is evidence that ordinary workers in the art would recognize the benefit of transmitting EPG data in conjunction with video programming in an Internet enabled set top box. Therefore, it would have been obvious to

one having ordinary skill in the art at the time the invention was made to modify the video and multimedia-displaying apparatus of Maa with the multimedia-object linked EPG of Matthews in order to enable a program guide to present further information to a user and link program icons to web pages.

Regarding Claim 10, Maa discloses a system as stated above in Claim 1 wherein digital data representing video information contains packetized program information representing a video program and ancillary information including information describing a multimedia object associated with an image in the packetized program information. Maa in view of the well-known prior art further discloses the inclusion of a location indicator and a type indicator in the object information. Maa also discloses information for associating the multimedia object with an image as stated above in Claim 8. What is not disclosed, however, is a storage medium containing the aforementioned digital data. Matthews discloses a system as stated above wherein a head end provides digital video data and an EPG server. The system of Matthews implements a disk array data storage system to store video data (Col. 6, Lines 46-58) and an SQL database to store EPG data (Col. 6, Lines 59-64). The data fields for storing pointers to other media as well as hypermedia and other supplemental content are stored in the database as well (Col. 7, Lines 1-31). Further, Matthews discloses caching the databases locally on the client set top boxes (Col. 7, Lines 32-35). Matthews is evidence that ordinary workers would recognize the benefit of storing digital data on a storage medium in a video and multimedia system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the video and multimedia-displaying

apparatus of Maa with the storage medium containing digital data representing video information of Matthews in order to quickly and non-linearly retrieve, transmit, cache, and playback digital data and packetized program information containing ancillary information.

Regarding Claim 11, Maa in view of Matthews discloses a system as stated above in Claim 10. Matthews further discloses that the ancillary information comprises program specific information containing an electronic program guide wherein the multimedia object is associated with the program guide as stated above in Claim 9.

Regarding Claim 44, Maa discloses a method for processing packetized program information from a first source (RF Video) to provide data content to a program comprising a method of identifying ancillary information in the packetized program information (See Figures 3-6). The information includes a first identifier for identifying a location of data representing a multimedia object (URL, See Figure 3). The information further includes an identifier for identifying a location of data representing a video program in the program information (Cols. 14-15, Lines 60-19). It is inherent in such an MPEG-2 stream that various video channels and program data are multiplexed together and addressed by PIDs. The system of Maa discloses acquiring and decoding the multimedia object and video program data using the ancillary information and formatting the data for display (See Figure 1, Video Display Processor). What is not disclosed, however, is a second identifier for identifying a location of data representing a program guide. Matthews discloses an electronic program guide wherein program guide data is provided by the video head end (Col. 6, Lines 59-64). Matthews is evidence that ordinary

workers in the art would recognize the benefit of distributing electronic program guide information in a packetized data program stream of a web browser-enabled set top box. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method of Maa with the electronic program guide data of Matthews in order to implement such a program guide in a GUI-enabled set top box already supporting packetized data processing.

Regarding Claim 46, Maa in view of Matthews discloses a method as stated above in Claim 44. Maa discloses a method wherein the first identifier for identifying a location of data representing a multimedia object identifies a location of the multimedia object in the packetized program information from the first source (See Figure 2). Matthews discloses a method wherein the second identifier for identifying a location of data representing program guide information identifies a location of the multimedia object in the packetized program information from the first source (See Figure 2).

Regarding Claim 47, Maa in view of Matthews discloses a method as stated above in Claim 46. Maa discloses a method wherein the information is derived from a second source different from the first source using an Internet URL (Col. 5, Lines 56-57).

Regarding Claim 48, Maa in view of Matthews discloses a method as stated above in Claim 44. Maa further discloses a method wherein the formatting step includes associating the multimedia object with a video image (Col. 5, Lines 14-25) and forming a composite image for display combining the multimedia object and a video program (Col. 5, Lines 1-13).

8. Claims 12-13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al.

Regarding Claim 12, Matthews discloses a method for forming program guide information at a first source suitable for decoding the information to provide data content of a program (See Figures 2 and 5). Matthews further discloses forming information describing a multimedia object associated with an image in the program information (Col. 7, Lines 9-30 and Figure 7). The information comprises a location indicator identifying a location of a multimedia object for use in acquiring the object (See Figure 2) and forming linking information associating the object with an image in the information. The multimedia object and linking information is incorporated with the packetized data for output to a transmission channel (Col. 7, Lines 22-42). What is not disclosed, however, is a type indicator identifying a multimedia object type for use in decoding the object. Official Notice is hereby taken that it is well known in the art to embed a type indicator identifying a multimedia object type in a data stream containing multimedia objects. One such example is the Multipurpose Internet Mail Extension (MIME) type indicator, which is used by web browsers, among others, to determine the nature of embedded multimedia objects. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Maa to use the type indicator of the well-known prior art in order to support a wide variety of multimedia object types.

Regarding Claim 13, Matthews discloses a method as stated above in Claim 12. Matthews further discloses that the location indicator identifies a location of the

multimedia object in information derived from a second source different from the first source. In the system of Matthews, the second source is the Internet and the first source is a video signal (See Figure 3).

Regarding Claim 15, Matthews discloses a method as stated above in Claim 13. Matthews further discloses that the location indicator identifies a location of the multimedia object derived from the second source using Internet URL (See Figure 2). Further, it is inherent in such a system that to properly address and communicate with a web site referenced by a URL, the IP address must be resolved and used.

Regarding Claim 16, Matthews discloses a method as stated above in Claim 15. Matthews further discloses a method wherein the multimedia object comprises a web page that is viewed in a web browser (Col. 10, Lines 30-35). It is inherent in such a system that a web page being displayed on a web browser would be able to display video or still images, audio, text, advertisements, icons, animation, Email or a user prompting indicator such as a form table.

Regarding Claim 17, Matthews discloses a method as stated above in Claim 12. The MIME type of the well-known prior art includes data relating to the object format as stated above.

Regarding Claim 18, Matthews discloses a method as stated above in Claim 12. Matthews further discloses a method wherein linking information associates the multimedia object with an electronic program guide as shown in Figure 7.

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9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. in view of Metz et al.

Regarding Claim 14, Matthews discloses a method as stated above in Claim 13.

What is not disclosed, however, is the use of an MPEG packet identifier (PID) in the location indicator for the location of the multimedia object. Metz discloses a set-top terminal connected to a network for displaying additional programming information as seen in Figure 9. Metz discloses the specification of an MPEG PID in the location indicator to locate audio and video data to be decoded and presented in response to a user input (Col. 43, Lines 35-39). Metz is evidence that ordinary workers in the art would recognize the benefit of utilizing MPEG PIDs to transport multimedia data and a pointer to this data in a location indicator. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the video and multimedia-displaying method of Matthews with the referencing of MPEG PIDs for audio and video transport and location of Metz in order to transport and address multimedia objects sent in auxiliary data streams multiplexed with the initial video feed data.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew R Demicco whose telephone number is (703) 305-8155.

The examiner can normally be reached on Mon-Fri, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-5359.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.



mrd
January 28, 2004



**VIVEK SRIVASTAVA
PRIMARY EXAMINER**